

Title (en)  
MEASURING SYSTEM

Title (de)  
MESSSYSTEM

Title (fr)  
SYSTÈME DE MESURE

Publication  
**EP 3016409 A4 20170510 (EN)**

Application  
**EP 14816831 A 20140624**

Priority  
• JP 2013135149 A 20130627  
• JP 2014003390 W 20140624

Abstract (en)  
[origin: EP3016409A1] This measurement system quantitatively presents the effect of wearing an acoustic device that transmits sound to a user by contacting a vibrating body to a human auricle. In a measurement system (10) including an ear model (50), which is provided with an artificial auricle (51) and an artificial external ear canal (53), and an air-conducted sound gauge (60) that measures air-conducted sound in the artificial external ear canal, while an acoustic device (1) is contacted to the ear model (50) of the measurement system (10), the acoustic device (1) including a vibrating body (10a) and transmitting sound to a user by contacting the vibrating body (10a) to a human auricle, the measurement system (10) measures, with the air-conducted sound gauge (60), air-conducted sound generated by the acoustic device (1) and presents the result of measurement together with a characteristic corresponding to when the user wears the acoustic device (1).

IPC 8 full level  
**H04R 29/00** (2006.01); **H04R 25/00** (2006.01)

CPC (source: EP US)  
**A61B 5/121** (2013.01 - US); **H04R 25/30** (2013.01 - EP US); **H04R 25/407** (2013.01 - EP US); **H04R 2460/13** (2013.01 - EP US)

Citation (search report)  
• [Y] KR 100643311 B1 20061110 - SAMSUNG ELECTRONICS CO LTD [KR]  
• [Y] JP 2004179965 A 20040624 - CHUGOKU HOCHOKI CT KK, et al  
• [A] JP S58198338 A 19831118 - HITACHI LTD  
• [A] US 2005201574 A1 20050915 - LENHARDT MARTIN L [US]  
• [Y] SCHROETER J ET AL: "ON BASIC RESEARCH TOWARDS AN IMPROVED ARTIFICIAL HEAD FOR THE MEASUREMENT OF HEATING PROTECTORS//GRUNDLEGENDE UNTERSUCHUNGEN FUER EINE VERBESSERTE KUNSTKOPFMETHODE ZUR MESSUNG DER SCHALLDAEMMUNG VON GEHOERSCHUETZERN//RECHERCHES FONDAMENTALES EN VUE D'AME", ACUSTICA, S. HIRZEL VERLAG, STUTTGART, DE, vol. 50, no. 4, 1 April 1982 (1982-04-01), pages 250 - 260, XP008019818, ISSN: 0001-7884  
• [A] LI RUIJING ET AL: "Design and realization of inspection system for bone-conduction hearing aid", COMPLEX MEDICAL ENGINEERING (CME), 2013 ICME INTERNATIONAL CONFERENCE ON, IEEE, 25 May 2013 (2013-05-25), pages 551 - 555, XP032432430, ISBN: 978-1-4673-2970-5, DOI: 10.1109/ICCME.2013.6548311  
• See references of WO 2014208084A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3016409 A1 20160504; EP 3016409 A4 20170510; EP 3016409 B1 20200603**; JP 2015012378 A 20150119; JP 6234082 B2 20171122; US 10092223 B2 20181009; US 2016143563 A1 20160526; WO 2014208084 A1 20141231

DOCDB simple family (application)  
**EP 14816831 A 20140624**; JP 2013135149 A 20130627; JP 2014003390 W 20140624; US 201414899796 A 20140624